

Notice of Allowability

Application No.

10/751,635

Examiner

Sonny TRINH

Applicant(s)

GORCEA ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 01/06/04.
2. ☒ The allowed claim(s) is/are 19-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Kent Daniels (Reg. No. 44,206, new phone number 613-780-8673) on 05/05/2006 and on 05/23/2006.

Examiner's Amendment

2. The application has been amended as follows:

In the claims:

In **claim 19**, line 1, the term "[Reintroduced]" has been changed to --[Original]--.

In **claim 20**, line 1, the term "[Reintroduced]" has been changed to --[Original]-- and the letter "A" at the beginning of the sentence has been changed to -- "The"--.

In **claim 21**, line 1, the term "[Reintroduced]" has been changed to --[Original]—and the letter "A" at the beginning of the sentence has been changed to -- "The"--.

In **claim 22**, line 1, the term "[Reintroduced]" has been changed to --[Original]—and the letter "A" at the beginning of the sentence has been changed to -- "The"--.

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In **claim 23**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 24**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 25**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 26**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 27**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 28**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 29**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 30**, line 1, the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 31**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 32**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 33**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 34** line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 35**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 36** line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 37** line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 38**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

In **claim 39**, line 1, the term “[Reintroduced]” has been changed to --[Original]—and the letter “A” at the beginning of the sentence has been changed to -- “The”--.

This Examiner's amendment was necessary to overcome the ambiguity in the claim language.

(End of Examiner's Amendment)

Allowable Subject Matter

3. **Claims 20-39** are allowed which have been re-numbered to 1-15, 21, 16-20 respectively.

The following is an examiner's statement of reasons for allowance:

The invention relates in general to data signal processing and, in particular, to a hybrid circuit within a modem for coupling to a telephone line to improve received signal discrimination.

The instant application is directed to an non-obvious improvement over the invention described in Pat. No. 6,771,770 to Casier et al. The improvement comprises a communications circuit for coupling a signal source of the modem to a telecommunications network, the communications circuit comprising a signal line adapted to simultaneously carry a transmit (Tx) signal and a receive (Rx) signal and a compensation network connected to the signal line for balancing an impedance of the signal line; and b) a directional coupler for coupling a signal receiver of the modem to the communications circuit, the directional coupler circuit comprising:

i) a primary network connected to the communications circuit, the primary network being tuned to attenuate frequencies in a frequency band of the Tx signal, and having a respective primary network output;

ii) an amplifier having a respective amplifier input connected to the primary network output, and a respective amplifier output connected to the receiver; and

iii) a feedback network tuned to attenuate frequencies in a frequency band of the Tx signal, and connected between the amplifier input and the amplifier output; wherein the primary network, the amplifier, and feedback network are arranged to provide a virtual ground at the amplifier input.

Claims 21-39 are allowed by virtue of their dependency on claim 20.

Conclusion

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny TRINH whose telephone number is 571-272-7927. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward URBAN can be reached on 571-272-7899. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

5/23/06



SONNYTRINH
PRIMARY EXAMINER